

CLAIMS

1. A sputtering target prepared by the butt joining of metal sheets being made of the same material, wherein an intermetallic compound in a joined portion has an average particle diameter of 60% to 130% of the average particle diameter of the intermetallic compound in a non-joined portion.

2. A sputtering target prepared by the butt joining of metal sheets being made of the same material, wherein the average distance between adjacent intermetallic compound particles in a joined portion is 60% to 130% of the average distance between adjacent intermetallic compound particles in a non-joined portion.

3. A sputtering target prepared by the butt joining of metal sheets being made of the same material, wherein the average of the grain diameter of metallic crystals in a joined portion is 20% to 500% of the average of the grain diameter of metallic crystals in a non-joined portion.

4. A sputtering target prepared by the butt joining of metal sheets being made of the same material, wherein no dendritic structure is generated in a joined portion.

5. The sputtering target according to any one of claims 1 to 4, comprising one element selected from the group consisting of aluminum, an aluminum alloy, copper, a copper

alloy, silver, and a silver alloy.

6. The sputtering target according to any one of claims 1 to 4, comprising a planar area of 1 m² or more.

7. A method for preparation of a sputtering target comprising a step of joining metallic materials being made of the same material by friction stir welding.

8. The method for preparation of a sputtering target according to claim 7, wherein the moving distance of a rotating tool is 0.3 to 0.45 mm per revolution to perform the joining.

9. The method for preparation of a sputtering target according to claim 7, wherein annealing is performed after the joining.

10. The method for preparation of a sputtering target according to claim 7, wherein a metallic material prepared by spray forming is used.

11. A sputtering target prepared by the method according to any one of claims 7 to 10.